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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,631	07/08/2003	Sean Chang	1991013	1454

7590 08/22/2005

PRO-TECHTOR INTERNATIONAL  
20775 Norada Court  
Saratoga, CA 95070-3018

EXAMINER

FISCHER, JUSTIN R

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/615,631

Applicant(s)

CHANG ET AL.

Examiner

Justin R. Fischer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Suh (US 2002/0126381). Suh, as best depicted in Figure 4, discloses a method of stacking optical substrates comprising preparing a first and second optical substrate, forming multiple spacers on the surface of one of said optical substrates, applying an adhesive onto an interval defined between adjacent spacers, and curing the adhesive (Paragraphs 35, 39, 41, and 46). In this instance, at least two spacers 410 are arranged on opposite edges of a surface of one of the optical substrates and adhesive is applied at the regions or intervals defined between said spacers.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suh and further in view of either one of the Admitted Prior Art or Benneyworth (US 6,704,145). As noted above, Suh discloses the arrangement of at least two spacers on opposite edges of an optical substrate and the subsequent application of adhesive to the regions defined between said spacers. While Suh fails to suggest a vapor deposition method (to form the spacers), such a method is extremely well known and commonly used in the manufacture of spacers in the optical industry, as shown for example by either one of the Admitted Prior Art (Paragraph 4 and Figure 1B) or Benneyworth (Abstract). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to form the spacers of Suh using the well known and conventional technique of vapor deposition.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suh and further in view of either one of Zhou (US 5,953,469), Maule (US 5,434,663), or Fushimi (JP 2003-149414). It is initially noted that applicant cannot rely upon the foreign priority papers to overcome this rejection (with respect to Fushimi) because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

As noted above, Suh substantially teaches the method of the claimed invention, including the application of at least two spacers to a first optical substrate and the subsequent application of an adhesive between adjacent spacers. While the spacers of Suh are not formed as a metal coating film or a dielectric coating film, each of these materials is commonly used in the manufacture of spacers in the optical industry, as

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shown for example by either one of Zhou (Column 12, Lines 20-26), Maule (Column 2, Lines 25-35), or Fushimi (Abstract). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to form the spacers of Suh as either a metal coating film or a dielectric coating film as each form is consistent with the materials used in the optical industry.

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suh and further in view of Tamura (US 6,137,555). As noted above, Suh substantially teaches the method of the claimed invention, including the application of at least two spacers to a first optical substrate and the subsequent application of an adhesive between adjacent spacers. It is further noted that Suh is particularly directed to a method of stacking liquid crystal cells (optical substrates). While Suh fails to expressly suggest the application of a centrifugal force (via a rotary disc) to spread the adhesive, the reference does recognize the need to spread the adhesive into the relevant intervals (Paragraph 41). In this instance, it appears that the method of Suh does not place a criticality on the method by which the adhesive is deposited within the relevant intervals- this is evidenced by the suggestion of multiple methods to join the optical substrates (Paragraphs 45 and 47). As such, one of ordinary skill in the art at the time of the invention would have found it obvious to spread the adhesive of Suh using a rotary disk as it represents a well known and conventional method of spreading an adhesive in a variety of environments, including the optical industry, as shown for example by Tamura (Column 3, Line 45 – Column 4, Line 20). It is particularly noted that Tamura is similarly directed to a method of forming liquid crystal panels. Absent any conclusive showing of

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unexpected results, one of ordinary skill in the art at the time of the invention would have been amply motivated to spread the adhesive of Suh in accordance to the limitations of the claimed invention. Lastly, while it appears that the adhesive of Suh fills the intervals after spreading (as opposed to being deposited in the intervals), Suh does suggest that the adhesive can be disposed in any convenient pattern- one of ordinary skill in the art at the time of the invention would have found it obvious to position the adhesive anywhere on the optical substrate absent a conclusive showing of unexpected results.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Justin Fischer

August 17, 2005